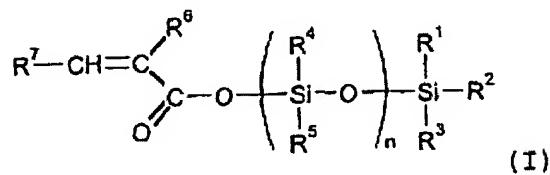


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of claims:

1. (Currently Amended) A process for the production of hydrocarbyl silyl unsaturated carboxylates of formula (I)



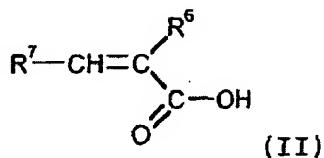
wherein

R¹, R², R³, R⁴, R⁵ each independently represent hydrogen, hydroxyl, alkyl, alkenyl, alkynyl, alkoxy, aryl, aryloxy, aralkyloxy, -O-SiR¹R²R³, -O-(SiR⁴R⁵O)_n-SiR¹R²R³ or aralkyl radical optionally substituted by one or more substituents independently selected from the group comprising alkyl, alkoxy, aralkyl, aralkyloxy, aryl, aryloxy, silyl, -O-SiR¹R²R³, -O-(SiR⁴R⁵O)_n-SiR¹R²R³, hydroxyl, halogen, amino or amino alkyl radicals, or may independently be an -O-C(O)-C(R⁶)=CHR⁷ group;

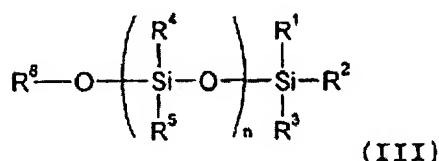
R⁶ represents a hydrogen atom, or an alkyl group, or (-R¹¹-)OC(O)OR¹⁰ wherein R¹⁰ represents an hydrogen atom, -(SiR⁴R⁵O)_n-SiR¹R²R³ wherein R¹, R², R³, R⁴, R⁵ are as already defined or an alkyl group; wherein R¹¹ is independently selected from alkyl, alkenyl, alkynyl, aryl or an aralkyl radical optionally substituted by one or more substituents independently selected from alkyl, alkenyl, alkynyl, aralkyl, aryl, hydroxyl, halogen, amino or amino alkyl radicals; O=0 or 1 O=0 or ‡;

R⁷ represents a hydrogen atom, or independently represents alkyl, aryl, aralkyl, alkenyl, alkynyl radical optionally substituted with the same radicals as defined for R⁶ above or R⁷ represents -

COOR^9 wherein R^9 represents an hydrogen atom, an alkyl group or $-(\text{SiR}^4\text{R}^5\text{-O})_n\text{-SiR}^1\text{R}^2\text{R}^3$ wherein R^1 , R^2 , R^3 , R^4 and R^5 are as already defined; by reaction of an unsaturated carboxylic acid of formula (II)



wherein R^6 and R^7 in formula (II) are as defined above; with a hydrocarbyl silyl compound of formula (III)



wherein R^1 , R^2 , R^3 , R^4 and R^5 are as defined above and R^8 is an hydrogen atom, an alkyl, aralkyl or aryl, alkenyl or alkynyl group optionally substituted with one or more substituents selected from the equivalent substituents as detailed for R^1-R^5 above; and each n above independently represents a number of dihydrocarbylsiloxane units from 0 to 1000; the said reaction being carried out in the presence of a silaphilic catalyst.

2. (Original) A process according to claim 1, wherein R^1 , R^2 , R^3 , R^4 and R^5 each independently represent an alkyl, an aryl group or a hydrogen atom.

3. (Currently Amended) A process according to claim 1-~~or 2~~, wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 and R^9 are each independently selected from the group comprising methyl, ethyl, propyl, isopropyl, isobutyl, n-butyl, sec-butyl, t-butyl.

4. (Currently Amended) A process according to claim 1~~claims 1, 2 or 3~~ wherein R^4 , R^5 , R^6 , R^7 and R^9 are independently methyl.

5. (Currently Amended) A process according to claim 1~~claims 1, 2, 3 or 4~~ wherein R¹, R² and R³ are n-butyl.

6. (Currently Amended) A process according to any preceding claim 1, wherein the silaphilic catalysts are fluoride containing mineral or organic salts which comprise, ~~but are not limited to~~, sodium fluoride, potassium fluoride, caesium fluoride or tetrabutyl ammonium fluoride (Bu₄NF); or are selected from N-methyl imidazole(NMI), N,N-dimethylamino pyridine(DMAP), hexamethylphosphoric triamide (HMPA), 4,4 dimethyl imidazole, N methyl-2-pyridone(NMP), pyridine N-oxide, triphenylphosphine oxide, 2,4 dimethyl pyridine, N-methyl 4-pyridone, dimethyl formamide(DMF), 3,5 dimethyl pyridine, N,N-dimethylethylene Urea(DMEU), N,N-dimethylpropylene Urea (DMPU), pyridine, imidazole, trimethylamine, dimethyl sulphoxide(DMSO), N-methyl pyrrolidinone(NMP), formamide, N-alkylformamides, N,N-dialkylformamides, acetamide, N- alkylacetamides, N, N-dialkylacetamides, alkylcyanides, N-methyl pyrrolidone, p-dimethylaminobenzaldehyde, 1, 2-dimethyl imidazole, LiOH, LiStearate, NaI, MeONa or MeOLi; wherein the term alkyl ~~in the above N-alkyl and N,N-dialkyl.....~~ amides and cyanides includes any linear cyclic, bicyclic, polycyclic, alkyl aliphatic or aromatic group and in the case of N,N-compounds the alkyl may be the same or different, ~~an example is N-formyl Resinamine.~~

7. (Currently Amended) A process according to any preceding claim 1, wherein the catalysts are homogenous or heterogenous.

8. (Currently Amended) A process according to any preceding claim 1 wherein the catalyst is able to coordinate reversibly with the silicon atom.

9. (Original) A process according to claim 8, wherein the catalyst is capable of forming a penta or hexa coordinated silicon species.

10. (Currently Amended) A process according to claim 1, wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁸, R⁹ and R⁷ are alkyl radicals independently selected from methyl, ethyl, n-propyl, isopropyl n-butyl,

isobutyl, sec-butyl-~~set-butyl~~, tert-butyl, 2-methylbutyl, pentyl, iso-amyl, hexyl, cyclohexyl, 3-methylpentyl, octyl and the like.

11. (Currently Amended) A process according to claim 1, wherein the hydrocarbyl silyl esters of formula I are selected from tri-n-butyl 1- (meth)acryloyloxy-silane, tri-n-propyl-1-(meth)acryloyloxy silane, tri-t-butyl-l- (meth)acryloyloxy-silane, tri-isopropyl-l-(meth)acryloyloxy-silane, triisobutyl-l- (meth)acryloyloxy-silane, tri-methyl-1-(meth)acryloyloxy-silane, triethyl-1-(meth)acryloyloxy-silane, tribenzyl-1-(meth)acryloyloxy-silane, triamyl-1-(meth)acryloyloxy-silane, triphenyl-1-(meth)acryloyloxy silane, nonamethyl-1-(meth)acryloyloxy-tetrasiloxane, nonaethyl-1-(meth)acryloyloxy-tetrasiloxane, nona-t-butyl-1-(meth)acryloyloxy-tetrasiloxane, nonabenzyl-1-(meth)acryloyloxy-tetrasiloxane, nona-isopropyl-1-(meth)acryloyloxy-tetrasiloxane, nona-n-propyl-1-(meth)acryloyloxy-tetrasiloxane, nona-isobutyl-1-(meth)acryloyloxy-tetrasiloxane, nona-amyl-1-(meth)acryloyloxy-tetrasiloxane, nona-n-butyl-1-(meth)acryloyloxy-tetrasiloxane, nona-dodecyl-1-(meth)acryloyloxy-tetrasiloxane, nona-hexyl-l-(meth)acryloyloxy-tetrasiloxane, nona-phenyl-1-(meth)acryloyloxy-tetrasiloxane, nona-octyl-1-(meth)acryloyloxy-tetrasiloxane, undecamethyl-1-(meth)acryloyloxy-pentasiloxane, undecaethyl-1-(meth)acryloyloxy-pentasiloxane, undeca-t-butyl-l-(meth)acryloyloxy-pentasiloxane, undecabenzyl-1-(meth)acryloyloxy-pentasiloxane, undeca-isopropyl-1-(meth)acryloyloxy-pentasiloxane, undeca-n-propyl-1-(meth)acryloyloxy-pentasiloxane, undeca-isobutyl-1-(meth)acryloyloxy-pentasiloxane, undeca-amyl-1-(meth)acryloyloxy-pentasiloxane, undeca-n-butyl-1-(meth)acryloyloxy-pentasiloxane, undeca-dodecyl-1-(meth)acryloyloxy-pentasiloxane, undeca-hexyl-1-(meth)acryloyloxy-pentasiloxane, undeca-phenyl-1-

(meth)acryloyloxy-pentasiloxane, undeca-octyl-l-
(meth)acryloyloxy-pentasiloxane, tridecamethyl-l-
(meth)acryloyloxy-hexasiloxane, tridecaethyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-t-butyl-l-
(meth)acryloyloxy-hexasiloxane, tridecabenzyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-isopropyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-n-propyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-isobutyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-amyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-n-butyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-dodecyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-hexyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-phenyl-l-
(meth)acryloyloxy-hexasiloxane, trideca-octyl-l-
(meth)acryloyloxy-hexasiloxane, -(meth)acryloyloxy-
hexasiloxane-1,3,3,3-tetramethyl-1-trimethylsilyloxy-1-(meth)acryloyloxy-disiloxane,
1-ethyl-3,3,3-trimethyl-1-trimethylsilyloxy-1-(meth)acryloyloxy-disiloxane
1-ethyl-3,3,3-trimethyl-1-trimethylsilyloxy-1-(meth)acryloyloxy-disiloxane,
tris-(trimethylsilyloxy)-1-methacryloyloxy-silane and polymers thereof.

12. (Currently Amended) A process according to any preceding claim 1, wherein the catalysts are independently~~independably~~ selected from DMF, DMSO, formamide, N-alkylformamides, N, N-dialkylformamides, acetamide, N-alkylacetamides, N,N-dialkylacetamides, N- Methyl pyrrolidone, p-dimethylaminobenzaldehyde, DMAP, N- methyl imidazole, 1,2-dimethyl imidazole, HMPA, DMPU, NaI, MeONa, MeOLi, Bu4NF, Ph3PO, LiOH, LiStearate and pyridine N-oxide.

13. (Currently Amended) A process according to any preceding claim 1, wherein the catalysts are present at a level of 0.001-100 mol% (mol/mol silane).

14. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the reaction includes a polymeric inhibitor.

15. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the reaction is carried out in a suitable solvent.

16. (Original) A process according to claim 15, wherein suitable solvents include non polar inert solvents, aliphatic hydrocarbons, cyclic and non cyclic ethers.

17. (Currently Amended) A process according to ~~claim any claims 15 or 16~~, wherein the solvent is independently selected from pentane, hexane, heptane, toluene, xylene, benzene, mesitylene, ethylbenzene, octane, decane, decahydronaphthalene, diethyl ether, diisopropyl ether, diisobutyl ether or mixtures thereof.

18. (Currently Amended) A process according to ~~claim 15 any of claims 15-17~~, wherein the solvent causes no distillation of any of the reactants but allows reactive distillation.

19. (Currently Amended) A process according to ~~claim 15 any of claims 15-18~~, wherein the solvent forms a low boiling azeotrope with the distilled R⁸OH.

20. (Currently Amended) A process according to ~~claim 15 any of claims 15-19~~, wherein the solvents are independently selected from pentane, hexane, heptane, toluene and xylene.

21. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the reaction is carried out in the range 0°C - 200°C.

22. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein a polymerisation inhibitor is present in the range 0.001-10% wt/wt of the total reaction mix.

23. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the molar ratio of silane:acid is between 1:100 and 50:1.

24. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the solvent is at least 10 wt% of the total reaction mix at the start of the reaction.

25. (Currently Amended) A hydrocarbyl silyl monomer as defined in formula I produced by a process in accordance with ~~claim 1~~~~any of claims 1-24~~.

26. (Original) A process according to claim 1, wherein the number of (alk)acryloyl groups in formula I is less than 4.

27. (Original) A process according to claim 1, wherein the number of (alk)acryloyl groups in formula I is less than 1.

28. (Original) A process according to claim 1, wherein when R¹⁰ represents alkyl or hydrogen in formula II, it represents -(SiR⁴R⁵O)_n-SiR¹R²R³ in formula I, wherein n and R¹-R⁵ are as defined previously.

29. (Original) A process according to claim 1, wherein when R¹, R², R³, R⁴ or R⁵ are aryloxy, alkaryloxy, alkoxy or hydroxyl in formula III, they may represent O-C(O)-C(R⁶)=CHR⁷ in formula I.

30. (Original) A process according to claim 1, wherein where R⁹ represents an alkyl group or an hydrogen atom in formula (II), it may represent -(SiR⁴R⁵O)_n-SiR¹R²R³ in formula (I).

31. (Currently Amended) A process according to ~~claim 1~~~~any of claims 1-6 or 8-30~~ wherein said catalyst may be a metal alkoxide, an organic tin compound or a boron compound or cyclic 1,3,5 triisopropoxycyclotritrialuminoxane and the like.

32. (New) A process according to claim 6, wherein the silaphilic catalyst is N-formyl Rosinamine